

REMARKS/ARGUMENTS

Applicant has received the Office Action dated February 23, 2007, in which the Examiner: (1) rejected claims 1-9 and 14-20 under 35 U.S.C. § 103(a) as being allegedly obvious over Gerten et al. (U.S. Pat. No. 6,760,319, hereinafter "Gerten") in view of Shoobridge (U.S. Pat. No. 6,326,926, hereinafter "Shoobridge"); and (2) rejected claims 10-13 under 35 U.S.C. § 103(a) as being allegedly obvious over Gerten in view of Cannon (U.S. Pat. No. 6,650,871, hereinafter "Cannon"). Based upon the arguments contained herein, Applicant believes this case is in condition for allowance.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(A)

With respect to the rejection of independent claim 1 as allegedly obvious over Gerten in view of Shoobridge, Applicant respectfully traverses the rejection as set forth below. The Examiner cited Gerten as teaching a piconet comprising first and second units, but failing to teach multi-mode communication between the two units. Examiner further cited Shoobridge as teaching a first multi-mode communication device communicating with a second multi-mode communication device, the second multi-mode communication device being a combination of the two access points, 24b and 54b, taught in Shoobridge. The Examiner asserted that it would be obvious for one skilled in the art to provide the claimed second multi-mode communications device by combining access points 24b and 54b.

First, the Examiner failed to explain why it would have been obvious for one skilled in the art to combine access points 24b and 54b into one device. The Examiner's assertion of obviousness is conclusory. Obviousness cannot be sustained by mere conclusory statements; rather there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 997, 988 (Fed. Cir. 2006). As the Examiner has failed to articulate any such rationally supported reasoning, the conclusion of obviousness regarding the combination of access points and consequently the obviousness rejection of claim 1 cannot be sustained.

Second, there must be a motivation to combine the cited elements. However,

when the proposed combination would render the prior art invention unsatisfactory for its intended purpose, there is no suggestion or motivation to combine. Shoobridge, as illustrated in Fig. 3, teaches a terminal capable of communication with a Bluetooth access point and a separate IEEE 802.11 access point. This capability, as taught by Shoobridge, is due to each of “access points 24b and 54b resid[ing] in different radiation patterns.” The two volumes of sensitivity, as illustrated in Fig. 3, are separated by guard bands. Were access points 24b and 54b combined into one unit, the corresponding radiation patterns of the terminal would fully overlap vitiating the functionality of Shoobridge, and rendering the invention unsatisfactory for its intended purpose. Therefore, there is no suggestion or motivation to combine the access points of Shoobridge as required by law, MPEP § 2143.01, and consequently the obviousness rejection of claim 1 based on Shoobridge in view of Gerten cannot be sustained.

As to the combination of Shoobridge in view of Gerten, the Examiner asserted that the combination would have been obvious in order to provide the multi-mode system without interference as suggested by Shoobridge at col.2, ln.23-30. The statement at col.2, ln.23 of Shoobridge refers to mitigating interference between separate Bluetooth and IEEE 802.11 networks; however it in no way suggests or motivates the combination of Gerten with Shoobridge to provide a piconet comprising two multi-mode communication devices. Even if the access points of Shoobridge were combined into one device, one of ordinary skill in the art would not have been motivated to introduce the multi-mode terminal into Gerten absent the hindsight derived from Applicant’s disclosure. See *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (“To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher”).

Third, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. MPEP §

2143.01. Shoobridge (Fig. 3) relies on antenna orientation, placement of the terminal relative to the access points, and radiation patterns to affect operation. Combining the access points of Shoobridge necessarily changes the principle of operation of the reference, because the terminal of Fig.3 can no longer be positioned between the two physically displaced access points 24b and 54b as required. Therefore the proposed combination of the access points in Shoobridge would require substantial modification and redesign, as well as a change in the basic principles under which Shoobridge was designed to operate, rendering it insufficient to show obviousness. Consequently, the obviousness rejection of claim 1 cannot be sustained based on the cited reference.

Thus, the cited art fails to teach a piconet comprising first and second communications devices using Bluetooth and a second mode of communications. Further, no other art of record satisfies the deficiencies of Gerten and Shoobridge. For at least the above stated reasons, Applicant respectfully submits that independent claim 1, and those claims that respectively depend upon claim 1, are all in condition for allowance.

With respect to the rejection of independent claim 5 as allegedly obvious over Gerten in view of Shoobridge, the Examiner asserted that Gerten discloses all of the elements of claim 5 except that the third device is communicating to the second communication device using a second mode of transmission, as the Examiner alleges is taught by Shoobridge. Claim 5 has been amended to include the limitation "and wherein synchronization between the Bluetooth mode and the second mode is maintained in the third communication device." Applicant notes that the Examiner asserted, in regard to claim 9, that Shoobridge teaches synchronization between the Bluetooth mode and the second mode in the third communication device. However, the Shoobridge references cited by the Examiner fail to teach or suggest synchronization between the two modes, and Applicant is unable to identify any such teaching or suggestion in Shoobridge. Shoobridge relies on directional antennas, rather than synchronization, to enable operation in two modes. Thus, synchronization between the two modes is neither expressly nor inherently disclosed in Shoobridge. Likewise, no

other art of record discloses that “synchronization between the Bluetooth mode and the second mode is maintained in the third communication device.”

Moreover, as stated above, the statement at col.2, ln.23-30 of Shoobridge that the Examiner asserted as motivation to combine may provide motivation for mitigating interference in separate networks, but provides no motivation for the multi-mode scatternet of claim 5. The Examiner must show some objective teaching in the prior art, or that the knowledge of one of ordinary skill in the art would lead one to combine the relevant references. *In re Fine*, 837 F.2d at 1074.

For at least the above stated reasons, Applicant respectfully submits that independent claim 5, and those claims that respectively depend upon claim 5, are all in condition for allowance.

With respect to the rejection of independent claim 10 as allegedly obvious over Gerten in view of Cannon, the Examiner asserted that Gerten discloses all of the elements of claim 10 except the teaching of a multi-mode device, as allegedly taught in Cannon. Claim 10 has been amended to require “placing the first communication device in a second mode in order to communicate with a communication device from amongst the plurality of communication devices in the second piconet, the second mode being the mode used by the plurality of communication devices in the second piconet.” Cannon discloses the use of a second mode by a first base to communicate with a second base; however the second mode is not the mode used by the plurality of devices in the picocell, but rather is a mode used only between the bases. Neither Gerten nor Cannon, nor any other art of record discloses or suggests placing a device in a second mode where that mode is used by the plurality devices in the second piconet.

Further, the Examiner asserted that motivation to combine Cannon and Gerten may be found in Cannon, col.1, ln.54-60 stating that Bluetooth is based on a low-cost radio link. Applicant fails to see how a statement of the relative cost of the technology at issue provides the required objective motivation or suggestion to combine the specific cited references. *See In re Fine*, 837 F.2d at 1074. Thus, the Examiner has failed to

provide any legitimate suggestion or motivation, either in the references themselves or in the knowledge generally available to one skilled in the art, to combine Gerten and Cannon as suggested by the Examiner.

For at least the reasons stated above, Applicant respectfully submits that independent claim 10, and those claims that respectively depend upon claim 10, are all in condition for allowance.

II. CORRECTION OF INADVERTENT ERROR IN CLAIM 10

With this response, claim 10 has been amended by, adding the word "device," to correct an inadvertent and unintentional typographical error. The amendment to claim 10 is not in response to any of the Examiner's rejections, and does not alter the scope of the claim.

III. CONCLUSION

Applicant respectfully requests reconsideration and that a timely Notice of Allowance be issued in this case. However, in the event that additional extensions of time are necessary to allow for consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Texas Instruments Inc.'s Deposit Account No. 20-0668 for such fees.

Respectfully submitted,

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